2

PD-200031

## In the Claims:

1. (Currently Amended) A mobile wireless communication system, comprising:

a plurality of individual transponding nodes;

- a central processing hub in communication with each of said the plurality of individual transponding nodes, such that a downlink signal processed by said central processing hub is preprocessed so that the signal is radiated using a plurality of radiated signals with compensating time delays to [[a]] the plurality of said individual transponding nodes; and
- a plurality of mobile terminals associated with respective remote users for receiving said radiated signals from each of said plurality of individual transponding nodes simultaneously so that the radiated signals are added together coherently and thereafter simultaneously generating a return signal and directing the return signal through the plurality of individual transponding nodes;

said central processing hub processing the return signal to compensate for path differentials.

- 2. (Original) The wireless communication system of claim 1, wherein one or more of said plurality of individual transponding nodes is an individual satellite.
- 3. (Original) The wireless communication system of claim 1, wherein one or more of said plurality of individual transponding nodes is a high altitude platform.
- 4. (Original) The wireless communication system of claim 1, wherein one or more of said plurality of individual transponding nodes is a transmitter tower.
- 5. (Original) The wireless communication system of claim 1, wherein one or more of said plurality of individual transponding nodes is a balloon.
- 6. (Original) The wireless communication system of claim 1, wherein said central processing hub processes said signal such that all intended signals will arrive in-of-phase for an intended remote user, and out-of-phase for all other remote users.



3

PD-200031

- 7. (Original) The wireless communication system of claim 1, wherein in a reverse link mode, said plurality of mobile terminals transmit signals to said plurality of individual transponding nodes, which then radiate said signals to said central processing hub for processing.
- 8. (Currently Amended) A method for communicating with a mobile hand-held terminal, comprising:

processing a local user signal for both forward and return links at a central processing hub;

radiating said signal through multiple paths or transponder nodes;

receiving said signals at a plurality of transponding nodes;

re-radiating said signals from said plurality of transponding nodes to the mobile hand-held terminal; [[and]]

receiving said forward link signals from said plurality of transponding nodes at the mobile hand-held terminal whereby said re-radiated signal will be received coherently only for an intended remote user associated with the mobile hand-held terminal;

transmitting a plurality of return signals from the mobile hand-held terminal to the central processing hub through the paths or transponder nodes; and

post-processing the plurality of return time signals to compensate for path differentials by the hub processor.

- 9. (Original) The method of claim 8, further comprising:
  transmitting said return link signals to said plurality of transponding nodes from
  mobile hand-held terminals whereby signals are processed coherently by the hub
  processor.
- 10. (Original) The method of claim 8, wherein said signals are received by a high altitude platform system.
- 11. (Original) The method of claim 10, wherein said signals are received by a plurality of manned or unmanned airships.



4

PD-200031

- 12. (Original) The method of claim 10, wherein said signals are received by a plurality of balloons.
- 13. (Original) The method of claim 10, wherein said signals are received by a plurality of manned or unmanned airplanes.
- 14. (Original) The method of claim 8, wherein said signals are received by a tower based cellular network.
- 15. (Original) The method of claim 8, wherein said signals are received by a space based system.
- 16. (Currently Amended) A mobile wireless communication system for mobile users, comprising:
- a plurality of individual transponder nodes selected from one or more of the following node types: a tower based cellular network, a high altitude platform system or a space-based satellite system;
- a central processing hub in communication with each of said plurality of individual transponder nodes, whereby a signal processed by said central processing hub is radiated with compensating time delays to said plurality of individual transponders; and
- a mobile terminal associated with an intended user for receiving said radiated signals from each of said plurality of individual transponder nodes coherently thereafter simultaneously generating a return signal and directing the return signal through the plurality of individual transponding nodes;

whereby said radiated signals, if received by a non-intended user, are received incoherently[[.]];

said central processing hub processing the return signal to compensate for path differentials.

17. (Original) The mobile wireless communication system of claim 16, wherein said plurality of individual transponder nodes that radiate said signals to said intended user are all of the same type.



5

PD-200031



18. (Original) The mobile wireless communication system of claim 16, wherein said plurality of individual transponder nodes that radiate said signals to said intended user are selected from at least two of said platforms.